



## Conserving Water

Why conserve water? It's everywhere around us, costs almost nothing, and water use doesn't impact the environment. Or does it?

This brochure explains why water conservation is important and outlines steps homeowners and renters can take to conserve water. It was produced by the Chatham Borough Green Initiatives Committee.

### What is water?

Water is a resource that all life depends on. It has been on earth since the earth was formed billions of years ago. Over 96% of all water is in the earth's oceans, from which it is continuously recycled through evaporation into the atmosphere, precipitation as rain, and return flow to the oceans by way of the earth's rivers.

### Where does tap water come from?

Tap water in most towns and cities comes from rivers, lakes, reservoirs, and wells. In Chatham Borough, water is drawn from local wells, while in Chatham Township water is piped from reservoirs.

Before it comes to your tap, water is often passed through sand filter beds which trap any visible dirt and organisms. In addition, some water utilities treat water using advanced water treatment technology such as ozonation and carbon filtration, which remove substances that we cannot see. However, a large proportion of groundwater receives chlorination only.

After use, dirty water or sewage is collected first in drains, then in underground sewers and is transported via a sewerage system (a network of pipes and tunnels) to a sewage treatment plant. These plants use natural microorganisms to remove harmful substances from dirty water. Solid material (sludge) is separated from the liquid (effluent) and both are treated to produce clean effluent that can be released back to a river or canal.

### Why conserve water?

New Jersey is considered a water-rich state, with an average rainfall of 45 inches per year. However, demands on our limited water supply due to population

growth and development have increased greatly, making water conservation a prudent step for New Jersey's citizens year round. During the peak irrigation months of April to October, when we experience hotter, drier summer conditions, it is even more important to conserve water in order to avoid mandatory water use restrictions. Summer outdoor water use increases as people wash cars, fill pools, and water lawns and gardens. Water conservation allows more water to remain in our streams, lakes and rivers for recreational uses and aesthetic enjoyment while also providing habitat for our wildlife.

### Cost of water

The main reason many families conserve water is because of the water utility bill. Here are some examples of water savings:

- A family of four could save as much as \$75 a year just by turning off the tap while brushing their teeth in the morning and at night.
- By fixing a leaky toilet a family could save \$210 more.
- A family could save as much as 25,000 gallons and up to \$162 a month just by running an automatic irrigation system two times a week instead of four.

Each change in how much water you use may not save much money in itself, but small changes add up to big savings down the road.

# Ways to conserve water

## 1. Save water around the home

- Only water the lawn when needed; New Jersey landscapes need about 1 inch of water a week.
- Don't water the driveway or sidewalks
- Use 30-50% less water with drip irrigation and micro-sprays compared to sprinklers
- Use native plants that survive best in local conditions, and group plants together based on water need
- Choose drought tolerant grass varieties such as tall fescues
- Mulch around trees and plants to reduce evaporation and water consuming weeds
- Raise your lawn mower blade to at least 3 inches to promote deeper roots and a root system that retain soil moisture
- Don't overfertilize lawns as they need more water to survive
- Wash the car with a bucket or using a commercial car wash that recycles water
- Sweep driveways, sidewalks, and steps rather than hosing them off
- When using a hose, control the flow with an automatic shutoff valve
- Install covers on pools and spas and check for leaks around your pumps
- Water your lawn and garden in the morning or evening when temperatures are cooler to minimize evaporation
- Know where your master water shut-off valve is located. This could save

water and prevent damage to your home

## 2. Save water in the bathroom

- Most effective is cutting shower time to 5 minutes, which can save almost \$500 per year for a family of four
- Use a low flow showerhead
- When running a bath, plug the tub before turning the water on, then adjust the temperature as the tub fills up
- Replace an old water-guzzling toilet with a low flow toilet. An old toilet can be the largest water user in your home
- Turn off faucets when not in use, such as while brushing your teeth
- Update your faucet by attaching an inexpensive faucet aerator

## 3. Save water doing household chores

- Wash fruits and vegetables in a basin and not under running water
- Don't defrost food under running water
- Take care of household leaks
- Add food wastes to your compost pile instead of using the garbage disposal
- Wash dishes when the dishwasher is full
- When washing dishes by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water
- Replace the old dishwasher with a new high efficiency model

## 4. Save water in the laundry room

- Upgrade to a high efficiency clothes washer

- Wash only full loads of clothing
  - Lower the water setting to correspond with the size of the wash load
- ## 5. Use a rain barrel
- Up to 40% of the water used in a typical Morris County home in the summer is for irrigation of lawns and gardens. Using a rain barrel to capture water from the gutters lets a homeowner save on that water expenditure
  - The Morris County Soil Conservation District offers discounted 55-gallon rain barrels to homeowners, made from recycled plastics
  - Commercially advertised rain barrels can sell for \$100, and the Soil Conservation District is offering them for \$85 pre-assembled. A do-it-yourself version is \$65, and comes complete with detailed instructions and all of the attachments needed for assembly

## Water conservation resources

New Jersey Water Savers

<http://njwatersavers.rutgers.edu/>

Rutgers Rain Barrel brochure

[http://water.rutgers.edu/Stormwater\\_Management/rainbarrelbrochure.pdf](http://water.rutgers.edu/Stormwater_Management/rainbarrelbrochure.pdf)

Morris County Soil Conservation District

<http://www.mcscd.org/>

California Urban Water Conservation Council

<http://h2ouse.org/>